Appendix: Prevalence of mental ill health, traumas and post-migration stress among refugees from Syria resettled in Sweden after 2011: a population-based survey

Content:

Supplementary material 1: Prevalence of anxiety, depression, low SWB, PTSD and *any* in the total and among subpopulations based on analyses of five multiple imputed data sets, and compared to estimates from original non-imputed data set

	Anxiety % *, Dif **	Depression % *, Dif **	Low SWB % *, Dif **	PTSD % *, Dif **	Any % *, Dif **
Total (weighted)	32.4, 0.6	40.2, 0.0	37.8, 0.1	30.2, 0.3	53.6, 2.4
Total (unweighted)	32.2, 0.6	40.6, 0.0	38.4, 0.1	31.0, 0.4	54.2, 1.4
Gender					
Men	28.6, 1.1	38.0, 0.1	35.3, 2.3	29.6, 0.6	49.9, 1.4
Women	39.0, 0.2	44.0, 0.1	42.2, 0.0	31.4, 0.1	60.0, 1.3
Age-groups					
18-29	32.4, 1.1	38.3, 0.0	36.7, 0.3	25.7, 0.1	53.5, 0.7
30-39	26.2, 0.0	36.1, 0.1	36.9, 1.1	28.1, 0.9	48.9, 1.4
40-49	34.4, 0.2	41.6, 0.1	35.2, 0.5	29.6, 0.6	53.7, 2.0
50-64	43.3, 1.4	51.4, 0.3	45.9, 0.7	45.3, 0.6	64.5, 1.4
Level of education					
0- 9 years	34.1, 0.6	39.0, 0.1	34.4, 0.1	30.8, 0.2	52.8, 1.4
>9 years without a university degree	30.7, 0.9	41.7, 0.0	36.1, 0.3	31.5, 0.7	52.8, 0.6
> 12 years with a university degree	30.9, 0.3	40.9 0.0	44.2, 0.0	28.4, 0.3	55.4, 1.4
Marital status					
Married	31.4, 0.5	37.9, 0.0	35.9, 0.0	27.8, 0.5	51.4, 1.5
Unmarried	31.5, 0.6	41.8, 0.2	39.4, 0.4	31.5, 0.2	54.7, 1.2
Divorced/widow/widower	51.6, 0.2	55.2, 1.3	49.5, 0.5	50.2, 1.3	71.7, 1.1

*Pooled prevalence based on five multiple imputed datasets

** Difference between the pooled prevalence estimates based on the five imputed data sets and prevalence estimate prevalence estimate from analysis based on the original non-imputed data set.

Supplementary material 2: Prevalence of refugee related PTEs and their associations with anxiety, depression, low SWB and PTSD (ORs) based on analyses of five multiple imputed data sets, and compared to estimates from original non-imputed data set.

	%*, Dif **	Anxiety OR Range *** OR Dif **** P-value *****	Depression OR Range *** OR Dif **** P-value *****	Low SWB OR Range *** OR Dif **** P-value *****	PTSD OR Range *** OR Dif **** P-value *****
War at close quarters	85.1, 0.0	1.50-1.61, 0.01, 0.047	1.78-1.88, 0.04, <0.01	1.85-2.05, 0.06 <0.01	2.09-3.33, 0.05, <0.01
Forced separation from family or close friends	67.9, 0.0	2.14-2.35, 0.11, <0.01	2.39-2.49,0.04, <0.01	1.51-1.61, 0-01, <0.01	1.84-2.05, 0.06, <0.01
Loss or disappearance of family member(s) or loved one(s)	64.6, 0.3	2.03-2.10, 0.06, <0.01	1.83-1.97, 0.03, <0.01	1.91-2.03, 0.03, <0.01	1.51-1.61, 0.01, <0.01
Physical violence or assault	31.5, 0.6	3.01-3.58, 0.08, <0.01	3.12-3.34, 0.13, <0.01	1.91-2.03, 0.03, <0.01	1.91-2.03, 0.03, <0.01
Witnessing physical violence or assault	63.2, 0.1	2.25-2.48, 0.07, <0.01	2.42-2.55, 0.03, <0.01	1.99-2.11, 0.02, <0.01	1.99-2.11, 0.03, <0.01
Torture	31.7, 0.7	2.82-2.12, 0.05, <0.01	2.15-2.28, 0.07, <0.01	1.64-1.75, 0.05, <0.01	1.64-1.75, 0.05, <0.01
Sexual violence	7.5, 0.4	2.62-3.64, 0.18, <0.01	2.44-2.77, 0.07, <0.01	1.90-2.24, 0.06, <0.01	1.90-2.24, 0.06, <0.01
Other frightening situation where you felt your life was in danger	79.3, 0.1	2.70-2.98, 0.05, <0.01	3.17-3.29, 0.01, <0.01	3.12-3.37, 0.02, <0.01	3.12-3.37, 0.02, <0.01

All analyses are weighted and associations are adjusted for gender, age-groups, level of education and marital status. The reference categories are *not* exposed to the respective refugee related PTEs. P-values are calculated based on robust standard errors.

*Pooled prevalence from five multiple imputed data sets.

** Difference between the pooled prevalence estimates from analyses based on the five multiple imputed datasets and prevalence estimate from analysis based on the original non-imputed data set.

*** Range of ORs in the five multiple imputed data sets.

**** Difference between pooled ORs from analyses based on five multiple imputed data sets and ORs from analyses based on the original non-imputed data set.

***** Pooled p-values from analyses of five multiple imputed data sets.

Supplementary material 3: Prevalence of different types of post-migration stress and their associations with anxiety, depression, low SWB and PTSD (ORs) based on analyses on five multiple imputed datasets, and compared to estimates from original non-imputed data set.

	%*, Dif **	Anxiety OR Range *** OR Dif **** P-value *****	Depression OR Range *** OR Dif **** P-value *****	Low SWB OR Range *** OR Dif **** P-value *****	PTSD OR Range *** OR Dif **** P-value *****
Often felt disrespected due to my national background	4.3, 0.0	4.98-5.46, 0.14, <0.01	5.67-6.18, 0.12, <0.01	4.28-5.00, 0.24, <0.01	4.23-4.65, 1.49, <0.01
Often have had bothering difficulties communicating in Swedish	37.1, 0.0	1.94-2.06, 0.26, <0.01	2.53-2.63, 0.19, <0.01	2.08-2.64, 0.11, <0.01	2.76-2.90,0.04, <0.01
Often been unable to buy necessities	8.5, 0.0	2.95-3.10, 0.43, <0.01	2.95-3.10, 0.43, <0.01	2.76-3.06, 0.29, <0.01	3.46-4.28, 0.53, <0.01
Often missing my social life from back home	62.4 0.1	2.09-2.19, 0.13, <0.01	2.55-2.64, 0.24, <0.01	1.42-2.50, 0.26, <0.01	2.85-3.07, 0.07, <0.01
Often felt sad because not reunited with family members	50.2, 0.0	1.23-1.33, 0.03, 0.08	1.41-1.49, 0.03, <0.01	1.40-1.46, 0.04, <0.01	1.34-1.47, 0.09, 0.03
Often felt excluded or isolated in the Swedish society	19.9, 0.1	2.63-2.85, 0.30, <0.01	3.82-4.04, 0.54, <0.01	2.94-3.13, 0.13, <0.01	3.08-3.37, 0.04, <0.01

All analyses are weighted and associations are adjusted for gender, age-groups, level of education, marital status, all eight types of studied refugee-related PTEs, no. of types of PTEs and no. of types of PTEs squared. The reference categories are not often having been exposed to the respective post-migration stressful experiences. P-values are calculated based on robust standard errors

*Pooled prevalence from five multiple imputed data sets.

** Difference between the pooled prevalence estimates from analyses based on the five multiple imputed datasets and prevalence estimate from analysis based on the original non-imputed data set.

*** Range of ORs in the five multiple imputed data sets.

**** Difference between pooled ORs from analyses based on five multiple imputed data sets and ORs from analyses based on the original non-imputed data set.

***** Pooled p-values from analyses of five multiple imputed data sets.

Supplementary material 4: Associations between refugee related PTEs and anxiety, depression, low SWB and PTSD when outcomes are model as continuous variables (OLS)*

	Anxiety % β, p-value	Depression β, p-value	Low SWB β, p-value	PTSD β, p-value
War at close quarters	0.26, <0.01	0.30, <0.01	0.13, 0.14	0.44, <0.01
Forced separation from family or close friends	0.38, <0.01	0.49, <0.01	0.38, <0.01	0.52, <0.01
Loss or disappearance of family member(s) or loved one(s)	0.30, <0.01	0.34, <0.01	0.20,<0.01	0.45, <0.01
Physical violence or assault	0.61, <0.01	0.61, <0.01	0.40, <0.01	0.73, <0.01
Witnessing physical violence or assault	0.46, <0.01	0.47, <0.01	0.37, <0.01	0.65, <0.01
Torture	0.48, <0.01	0.46, <0.01	0.28, <0.01	0.58, <0.01
Sexual violence	0.53, <0.01	0.52, <0.01	0.37, 0.01	0.68, <0.01
Other frightening situation where you felt your life was in danger	0.54, <0.01	0.64, <0.01	0.57, <0.01	0.83, <0.01

*All analyses are weighted and adjusted for gender, age-groups, level of education and marital status. The reference categories are *not* exposed to the respective refugee related PTEs. P-values are calculated based on robust standard errors

Supplementary material 5: Associations between post-migration stress and anxiety, depression, low SWB and PTSD when outcomes are model as continuous variables (OLS)*

	Anxiety % β, p-value	Depression β, p-value	Low SWB β, p-value	PTSD β, p-value
Often felt disrespected due to my national background	0.72, <0.01	0.76, <0.01	0.70, <0.01	0.80, <0.01
Often have had bothering difficulties communicating in Swedish	0.28, <0.01	0.39, <0.01	0.41, <0.01	0.42, <0.01
Often been unable to buy necessities	0.64, <0.01	0.60, <0.01	0.55, <0.01	0.57, <0.01
Often missing social life from back home	0.23, <0.01	0.49, <0.01	0.43, <0.01	0.44, <0.01
Often felt sad because not reunited with family members	0.15, 0.02	0.21, <0.01	0.08, 0.20	0.13, 0.03
Often felt excluded or isolated in the Swedish society	0.42, <0.01	0.58, <0.01	0.52, <0.01	0.49, <0.01
Often distressing conflicts in my family	0.60, <0.01	0.84, <0.01	0.79, <0.01	0.63, <0.01

*All analyses are weighted and adjusted for gender, age-groups, level of education, marital status, all eight types of studied refugee-related PTEs, no. of types of PTEs and no. of types of PTEs squared. The reference categories are not often having been exposed to the respective post migration stressful experiences. P-values are calculated based on robust standard errors

Supplementary material 6: Associations between post-migration stress (using a lenient definition*) and anxiety, depression, low SWB and PTSD (ORs) with 95 % confidence intervals (95% CI)

	% (n)	Anxiety OR (95% CI) **	Depression OR (95% CI) **	Low SWB OR (95% CI) **	PTSD OR (95% CI) **
Felt disrespected due to my national background	37.2 (448)	2.33 (1.70-3.18)	2.29 (1.70-3.07)	2.05 (1.54-2.74)	2.46 (1.76-3.44)
Have had bothering difficulties communicating in Swedish	82.1 (989)	1.50 (0.97-2.33)	1.64 (1.10-2.45)	1.98 (1.10-2.98)	2.57 (1.57-4.24)
Been unable to buy necessities	38.7 (467)	1.94 (1.43-2.63)	1.94 (1.43-2.63)	1.85 (1.39-2.46)	2.12 (1.54-2.92)
Missing social life from back home	93.6 (1128	3.71 (1.62-8.50)	2.72 (1.41-5.23)	1.34 (0.73-2.45)	9.28 (2.79-30.90)
Felt sad because not reunited with family members	84.6 (1004)	1.26 (0.82-1.94)	1.28 (0.86-1.91)	1.39 (0.94-2.06)	1.21 (0.76-1.95)
Felt excluded or isolated in the Swedish society	64.3 (770)	2.13 (1.52-3.00)	3.00 (1.84-4.12)	2.59 (1.89-3.55)	3.10 (2.13-4.54)
Distressing conflicts in my family	35.4 (428)	1.71 (1.26-2.32)	2.44 (1.83-3.25)	2.20 (1.65-2.93)	2.31 (1.68-3.17)

* Defined as having had the respective post-migratory stressful experiences *at least once* since immigrated to Sweden

**All analyses are weighted and adjusted for gender, age-groups, level of education, marital status, all eight types of studied refugee-related PTEs, no. of types of PTEs and no. of types of PTEs squared. The reference categories are not often having been exposed to the respective post migration stressful experiences. P-values are calculated based on robust standard errors